

# COS20007

# Object-Oriented Programming

Topic 06 Part B

Responsibility Driven Design Activity

# Activity: Design objects for...

# Hospital Management System (HMS)

With functionalities of

- Patient Registration: add/update/delete
- Patient record management: add/update/delete
- Doctor and nurse information : add/update/delete.
  - Doctors: Neurologist, Pediatrics, Surgeon, Cardiologist, etc.
  - Nurse: Emergency nursing, Pediatric nursing, Surgical nurse, etc.
- Appointment Booking
  - Health Symptom: emergency, developed, mild, or regular visit
- Doctor and nurse assignment: who will assign the job (by Artificial Intelligent or by receptionists)
- Reception contact

# Task 1: Identify candidate roles

Hospital

Neurologist

Emergency Nursing

Patient

Pediatric

Pediatric Nursing

Patient Records

Surgeon

Surgical Nursing

Cardiologist

Receptionist

# Task 2: Identify some responsibilities for the roles

Hospital

List of patients

List of doctors

List of nurses

List of receptionist

Can add/remove patient

Can add/update patient record

Can add/remove doctors

Can add/remove nurses

Can search for patient

Enable booking

Care assignment

Patient

Name

DOB

Contact

Neurologist

Name

Contact

Hours/Availability

RequestTest

Experience

Provide feedback

Diagnose

Emergency Nursing

Name

Contact

Hourse/Availability

Experience

GeneralHealthCheck

Update the patient records

Patient Records

Which patient

IssueDate

isValid

Description

Pediatric

Pediatric Nursing

Surgeon

Surgical Nursing

Cardiologist

Assignment

Receptionist

Task 3: Identify some collaborations — How will objects work together?